ANCHOR BAY LOCAL ECONOMIC IMPACTS FOR 2007

(1) Campground income: $195,000
13,500 camper days, 918 dog days
50% to 60% spent locally — $97,500 to $117,000
utilities, supplies, taxes, etc.

(2) Campers: 3539 site rental days in 2007.
Mostly families spending $50 to $100 — $176,950 to $353,900
locally per day for fuel, groceries, equipment,
and souvenirs, art work, etc.

(3) Anchor Bay LLC partners
$2,000 to $6,000 per year — $72,000 to $216,000
same items as campers + upkeep of permanent
property at Anchor Bay Campground

"FIRST ORDER" TOTALS FOR 2007 — $346,450 to $686,000

This is significant economic input on this section of the California coast. The total exvessel revenue generated by commercial fishing for urchins, salmon, carb and rockfish+lingcod falls into the lower part of the same range.

Most campers come for abalone diving and fishing, weather permitting. <u>These "fisheries" appear sustainable, with a large proportion of adult animals remaining</u>, under present levels of extraction, which is controlled by the high winds and seas and limited points of entry along the coast

PERCENT OF CALIFORNIA ABALONE LANDED IN ANCHOR BAY

YEAR	2002	2003	2004	2005
NUMBER	5,446	6,470	5,593	4,759
% OF TOT	2.2	2.6	2.4	2.0 (est.)

Recently, more abalone have been taken each year near Arena Light, Arena Cove, Sea Ranch, Salt Point, Timber Cove and four to five times more from the Fort Ross – Reef Camp area.

Safe friendly family-oriented campground which provides beach and sea access (some free) for people from Sea Ranch to Point Arena including Lions Club Sand Castle Contest, Pomo gathering and ceremony, restroom and shower facilities to local residents with shallow wells, beach access for people staying in local Inns and Hotels. Special rates for seniors. Spearfishing contests will not occur. Continued enhancement the Fish Rock Creek steelhead environment planned.

presented to the MLPA RSG by J. Norton, 831-375-6497, 605 14th Street Pacific Grove, CA 93950 11-12 December 2007.

Linkages between the physical environment and the ecosystem.

The left diagram was developed from oceanographic and meteorological research in the area between Point Arena and Salt Point. Winds are unusually strong south of Pt. Arena because of the unique angle of the coast line and coastal ridge adjacent to the coast. As a consequence offshore transport in the ocean is strong (dashed arrow), reducing settlement of pelagic larva (and fish) where the winds are strongest. Some of the scientific work on these extreme physical conditions is reported in the **Journal of Geophysical Research, Vol. 92 - c2, 1987.**

The right hand diagram, which shows that larval settlement is possible only on occasions when winds slacken for a few days, is adapted from a paper on red sea urchin larva settling from the drifting plankton by **(Wing et al. S. Afr. J. Mar. Sci. Vol. 19, p. 119).** These lower wind periods are much less frequent, (1/3rd) of the time between Stewart's Point and Arena Cove.

The series of bar graphs (right) show that in areas north and south of the windiest area (smaller arrows), that is north of Arena Cove and south of Stwarts Point, there was a settlement episode shown by the dark bars (right diagram). These dark bars are much reduced in the area of the greatest coastal winds (larger arrows).

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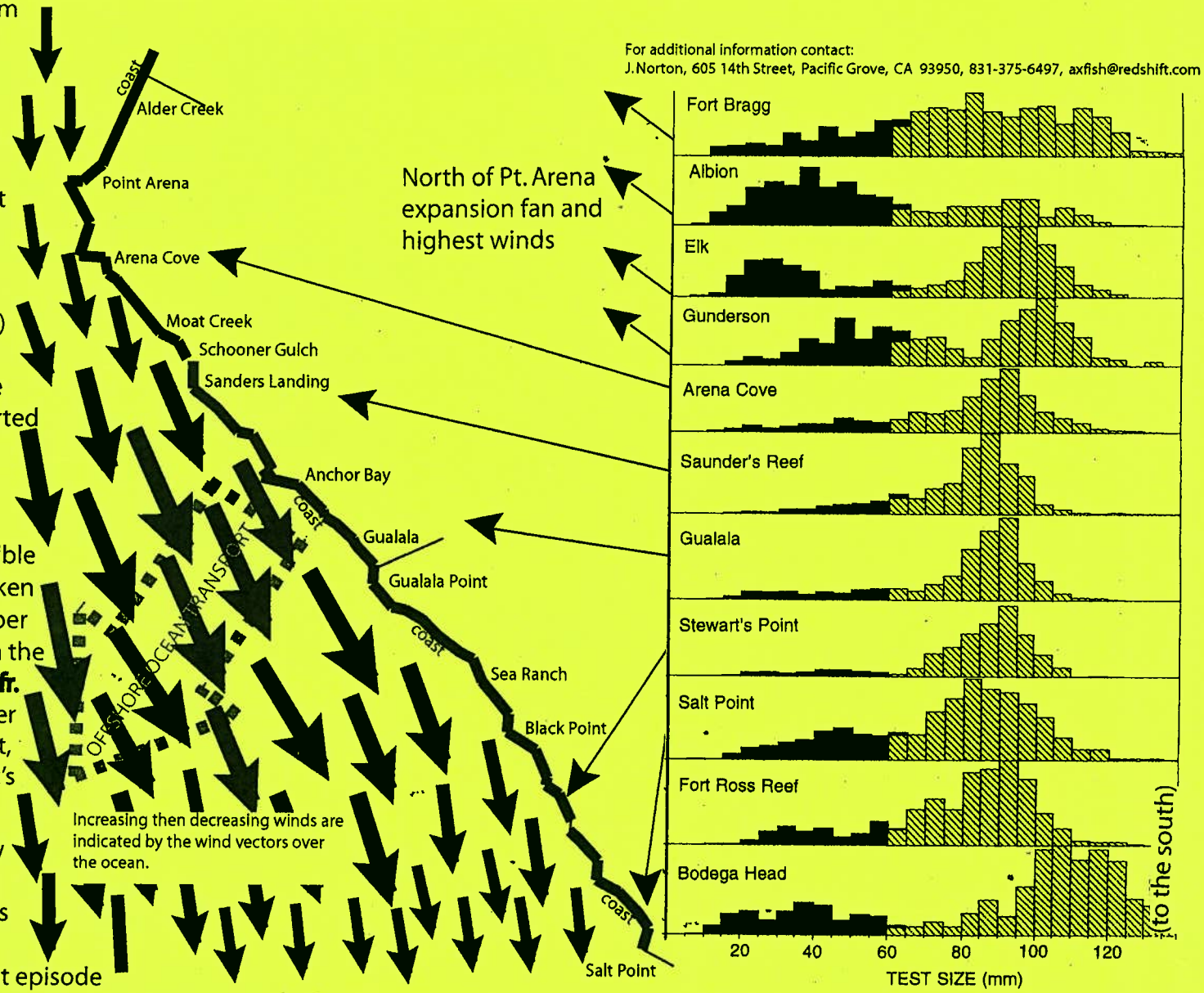

It should also be noted that the older larva (larger than 100 mm) that were in the first settlement episode recorded are nearly absent between Arena Cove and Salt Point. Settlement in the high wind area was only possible about one third of the measurement interval. These panels show one of the biological consequence of the physical environmental conditions. Because of the strong offshore transport and upwelling between Arena Cove and Stewart's Point this is far from a prime nursery area for fish and invertebrates.